CLAIMS

What is claimed:

1. A self-propelled mower comprising:

a frame;

a plurality of ground engaging wheels supporting said frame;

a motor operatively connected to an electrical generator, said electrical generator providing electrical energy in response to mechanical motion imparted from said motor;

a housing enclosing said motor and said electrical generator;

a plurality of reel type lawn mowers supported by said frame;

a sound insulating material disposed on said housing; and

an active noise abatement system disposed on said housing.

2. The self-propelled mower of claim 1 wherein said sound insulating material includes a lining disposed on an interior of said housing, said lining having sound abating material to assist in the attenuation of sound.

3. The self-propelled mower of claim 2 wherein said sound abating material includes a closed cell urethane material.

4. The self-propelled mower of claim 1 wherein said sound insulating material includes a lining disposed on an exterior of said housing, said lining having sound abating material to assist in the attenuation of sound.

5. The self-propelled mower of claim 4 wherein said lining includes a metallic material having sound abating characteristics.

6. The self-propelled mower of claim 4 wherein said active noise abatement system further includes:

an acoustical sensor for detecting acoustical sound generated within the interior of said housing, said acoustical sensor generating an output signal varying in accordance with said acoustical sound;

a controller receiving said output signal and determining an output signal operative to cancel said acoustical sound; and

at least one speaker driven by said output signal of said controller, said at least one speaker producing an acoustical output operative to substantially cancel said acoustical sound within said interior of said housing.

7. The self-propelled mower of claim 6 wherein said acoustical sensor comprises at least one microphone disposed within said interior of said housing.

8. The self-propelled mower of claim 6 wherein said controller determines said output signal substantially 180 degrees out of phase with said acoustical sound.

9. A lawnmower comprising:

a frame;

a plurality of lawn cutting elements supported from said frame and driven by a plurality of electric motors, said lawn cutting elements moveable between a raised non-operative position and a lowered operative position whereby said lawn cutting elements engage a cutting surface;

an internal combustion motor;

an electrical generator receiving mechanical input from said internal combustion motor and operable to provide electrical power for operating said plurality of electric motors to drive said lawn cutting elements;

a housing enclosing said internal combustion motor and said electrical generator;

a sound insulating material disposed on said housing; and

a sound generating system for producing sound in response to sound created within said housing.

10. The lawnmower of claim 9 wherein said sound insulating material includes a lining disposed on an interior of said housing, said lining having sound abating material to assist in the attenuation of sound.

11. The lawnmower of claim 10 wherein said sound abating material includes a closed cell urethane material.

12. The lawnmower of claim 9 wherein said sound insulating material includes a lining disposed on an exterior of said housing, said lining having sound abating material to assist in the attenuation of sound.

13. The lawnmower of claim 12 wherein said lining includes a metallic material having sound abating characteristics.

14. The lawnmower of claim 9 wherein said sound generating system further includes:

an acoustical sensor for detecting acoustical sound generated within the interior of said housing, said acoustical sensor generating an output signal varying in accordance with said acoustical sound;

a controller receiving said output signal and determining an output signal operative to cancel said acoustical sound; and

at least one speaker driven by said output signal of said controller, said at least one speaker producing an acoustical output operative to substantially cancel said acoustical sound within said interior of said housing.

15. The lawnmower of claim 14 wherein said acoustical sensor comprises at least one microphone disposed within said interior of said housing.

16. The lawnmower of claim 14 wherein said controller determines said output signal substantially 180 degrees out of phase with said acoustical sound.

17. A self-propelled mower comprising:

a frame supported upon a plurality of ground engaging wheels;

an internal combustion engine;

an electrical generator creating electrical power from a mechanical input generated by said internal combustion engine, said electrical generator and said internal combustion engine producing a collective motor sound;

a plurality of cutting elements;

a housing enclosing said internal combustion engine and said electrical generator;

a sound abating material disposed on said housing;

a sound generating system producing sound in response to said collective motor sound, said sound produced by said sound generating system and said collective motor sound having a net cumulative sound lower than said collective motor sound.

18. The lawnmower of claim 17 wherein said sound generating system further includes:

an acoustical sensor for detecting acoustical sound generated within the interior of said housing, said acoustical sensor generating an output signal varying in accordance with said acoustical sound;

a controller receiving said output signal and determining an output signal operative to cancel said acoustical sound; and

at least one speaker driven by said output signal of said controller, said at least one speaker producing an acoustical output operative to substantially cancel said acoustical sound within said interior of said housing.

19. The lawnmower of claim 18 wherein said acoustical sensor comprises at least one microphone disposed within said interior of said housing.

20. The lawnmower of claim 18 wherein said controller determines said output signal substantially 180 degrees out of phase with said acoustical sound.